SENSITIVE MATERIAL REMOVED

FROM:
File Cabinet # 1

Drawer # 2

S.L. Folder # 21

TO:
Envelope # 1 of 1

Item # 1

Subject South African Minerals Material 28 Jan 1980

Material has been relocated to CIA Declassification Center by CIA/CIO/IMS/CDC

21 February 2002

MEMORANDUM FOR: Ben Evans
7E-13 Hqs.
25X1

Attached is the material you requested for Admiral Turner. Also enclosed is a recent paper we did on Soviet potential for metals market manipulation which may be relevant to his interests.

25X1

Chief, Agriculture & Materials Branch
Office of Economic Research

Date 24 Feb 1981

FORM 5-75 101 USE PREVIOUS EDITIONS

Approved For Release 2009/09/30 : CIA-RDP05T00644R000200770004-5

Dave,
Your copy.
rd

MEMORANDUM FOR: THE RECORD

The attached materials on Southern Africa's minerals output were "off the shelf" inputs to the DCI's Worldwide Congressional Briefing. They were hand carried to [redacted] Deputy NIO for Africa and Near East) in response to his urgent request. Coordination with D/NE took place. 25X1

[redacted] 25X1

Agriculture and Materials Branch
International Materials Division
Office of Economic Research

Attachments:
As stated

ER M 80-10074

Date 28 Jan 80

FORM 5-75 101 USE PREVIOUS EDITIONS

Distribution:
1 - D/OER, EO/ER w/att
1 - D/M w/att
1 - Comm. [redacted] w/at 25X1
1 - Bruce Clarke, Jrw/a
1 - [redacted] w/att 25X1
3 - PPG w/att
3 - M/AM w/att
1 - OER/SA/PS w/att
1 - NIO/AF&NE w/att 25X1
1 - NIO/PE w/att
OER/M/AM [redacted]
[redacted] 28 Jan 80 25X1

THE IMPORTANCE OF SOUTHERN AFRICAN MINERALS TO THE FREE WORLD

Southern Africa is one of the richest mineralized regions in the world producing approximately:

60 percent of Free World output of chromium
63 percent of Free World output of cobalt
87 percent of the platinum group metals
71 percent of the Free World's industrial diamonds
56 percent of its manganese
55 percent of its vanadium
23 percent of its antimony

Many other minerals are also mined, of course, but in quantities too small to have much significance on world markets.

South Africa is the major mineral producer of Southern Africa accounting for 87 percent of the Free World's production of the platinum group minerals, nearly 75 percent of the Free World's gold output, 55 percent of Free World vanadium, 50 percent of Free World chromium, 40 percent of Free World manganese and for a large share of Free World uranium, antimony, and diamonds.

Zaire also ranks high in importance, accounting for some 50 percent of the Free World's cobalt, 50 percent of its industrial diamonds, 29 percent of its germanium, and 7 percent of Free World copper.

Zambia produces about 10 percent of Free World cobalt, 10 percent of its copper, and small quantities of lead and zinc.

Note: In Southern Africa we are including South Africa, Namibia, Botswana, Lesotho, Swaziland, Mozambique, Zimbabwe Rhodesia, Zambia, Angola, Zaire, and Gabon.

Note: Platinum Group Metals include: platinum, palladium osmium, iridium, rhodium, ruthenium.

ER M 80-10074

Rhodesia is important for its high grade chromite (about 9 percent of Free World output) and for its long fiber asbestos used in military applications. The country also produces small quantities of nickel, gold, and copper. Its coal deposits have little world significance but are a major source of fuel for the Zambian copper industry.

Gabon is important for its manganese ore which accounts for some 15 percent of Free World output. It also has large deposits of uranium.

Namibia produces copper, lead, zinc, cadmium, gem diamonds, and uranium. Namibia's output of uranium is about 3,000 to 5,000 tons of yellow cake (U_3O^8) making it the third or fourth largest producer in the Free World. Potential expansion could raise output to some 10,000 tons which would raise Namibia to second place after the United States.

There are several important points that should be made regarding the minerals of Southern Africa.

1. Southern Africa accounts for so large a share of Free World output of certain minerals, it would be difficult if not impossible to replace them if they were lost to the West. These include: cobalt, chromium, the platinum group, manganese, vanadium, and industrial diamonds.

2. All of these countries consume relatively little of their output and export most of their production to the west.

3. The USSR is either the only other producer of significance as in the case of the platinum group metals, or else is a major producer as in the case of chromium, gold, vanadium, manganese, and industrial diamonds. It also mines a large share of its own cobalt requirements.

4. The entire region of Southern Africa is a tinder box, extremely vulnerable to insurgency and/or political rebellion, e.g. the recent short term loss of cobalt from Zaire's Shaba province following the invasion by Angola based insurgents, the fighting between Rhodesia and Zambian based insurgents, and the threat of rebellion of Blacks in South Africa.

5. In the cases of Zaire and Zambia, mineral exports depend on a very shaky transport system which can easily be disrupted and often is.

Western Dependency

These points are particularly disturbing when we consider the dependency of the industrial west and Japan on minerals from Southern Africa. The United States, Western Europe, and Japan depend on imports for 90 percent or more of their consumption of chromium, cobalt, the platinum group metals, manganese, and industrial diamonds. At least half of their imports of these metals come from Southern Africa and in some cases as much as 90 percent originate in Africa. Moreover, no reasonably viable alternative sources exist for some of them--none for platinum in particular but also none that could fully replace cobalt and industrial diamonds. Alternatives for the rest, including substitute metals, could not be developed quickly, in some cases not for a good number of years.

Outlook

Prospects for stability in Southern Africa remain uncertain and the likelihood of interruptions in the flow of minerals to the industrialized nations in the future is ever present.

One of the most serious threats over the next one to two years is a repetition of last year's attack on Kolwezi where most of Zaire's cobalt is mined and processed. Destruction of the Kolwezi production facilities would probably be the foremost goal of the insurgents.

Further transportation problems for Zaire and Zambia will probably occur as they have so often in the past hampering copper shipments to ocean ports.

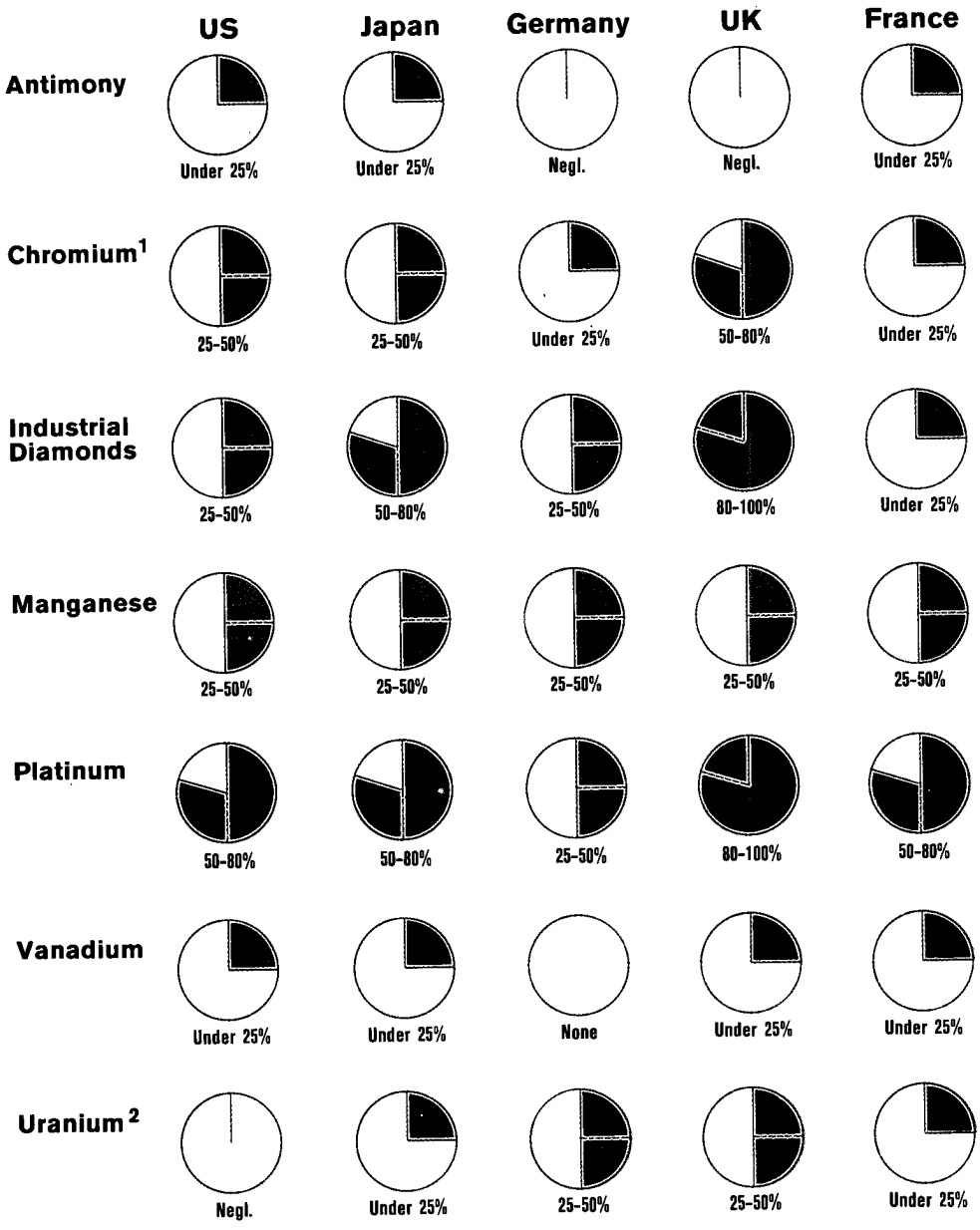
Civil unrest and guerrilla activity in Rhodesia could interrupt mineral production in that country especially if the biracial settlement recently reached in London collapses.

Black unrest in South Africa and sabotage of mines and equipment could interrupt output of minerals in that country. It is doubtful that such disruptions over the next few years would be prolonged, but the future points to increasing activity of this kind and some years down the road Black revolt is likely to reach the stage where disruptions will be serious.

IMPORT RELIANCE OF MAJOR INDUSTRIAL NATIONS
ON MINERALS PRODUCED IN SOUTHERN AFRICA

	UNITED STATES		JAPAN		WESTERN EUROPE	
	Import Reliance	Reliance on Southern Africa	Import Reliance	Reliance on Southern Africa	Import Reliance	Reliance on Southern Africa
Chromium	91%	50%	96%	40%	96%	50%
Cobalt	97%	80%	98%	90%	98%	80%
Platinum Group Metals	91%	70%	90%	70%	90%	75%
Manganese	98%	60%	98%	50%	97%	65%
Vanadium	35%	50%	98%	65%	98%	10%
Antimony	45%	35%	88%	10%	75%	10%
Industrial Diamonds	100%	90%	98%	90%	98%	95%

South Africa: Exports of Critical Minerals as Share of Consumption in Major Western Countries



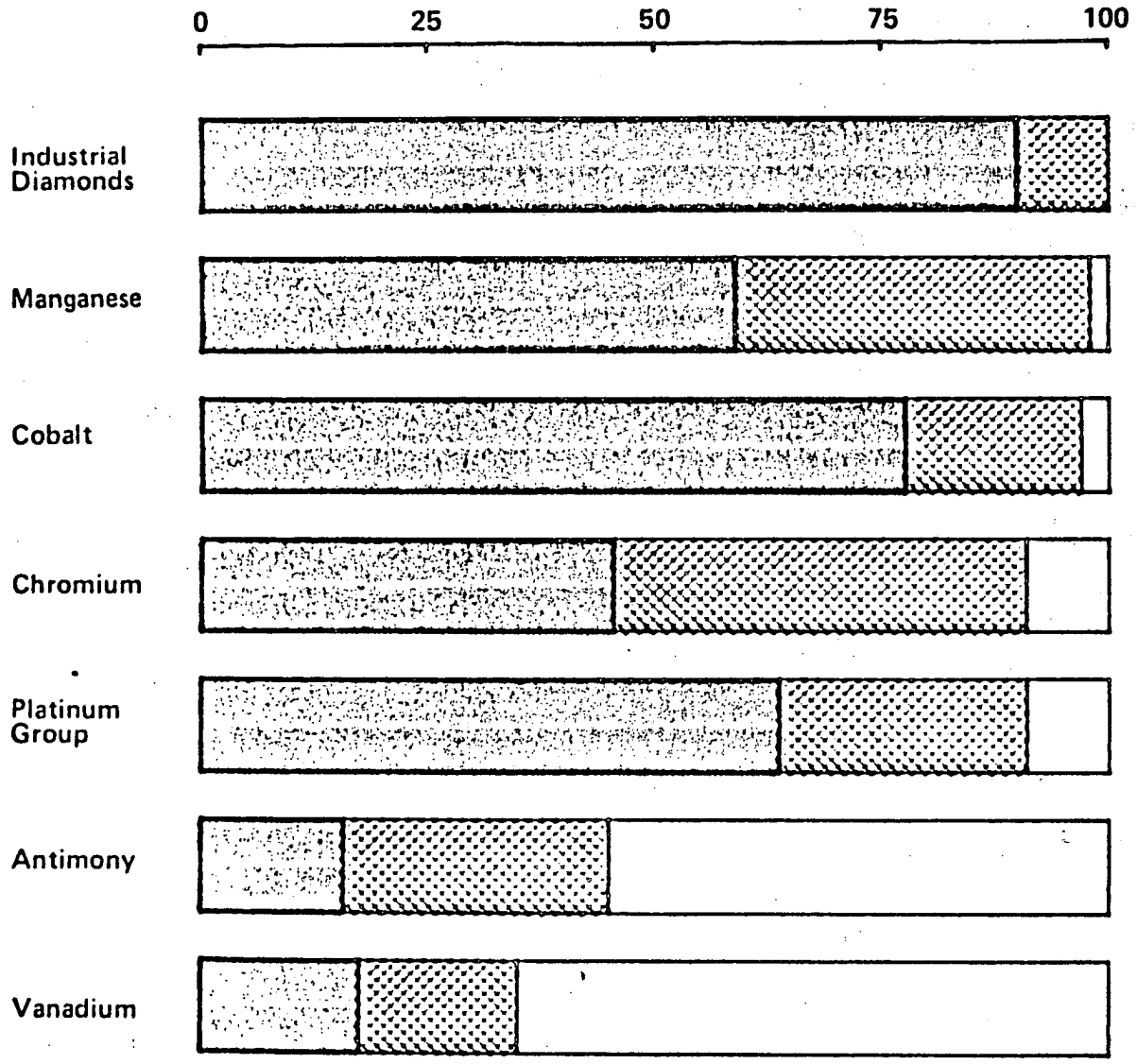
1. Includes ores and metal.

2. Estimated.

624200

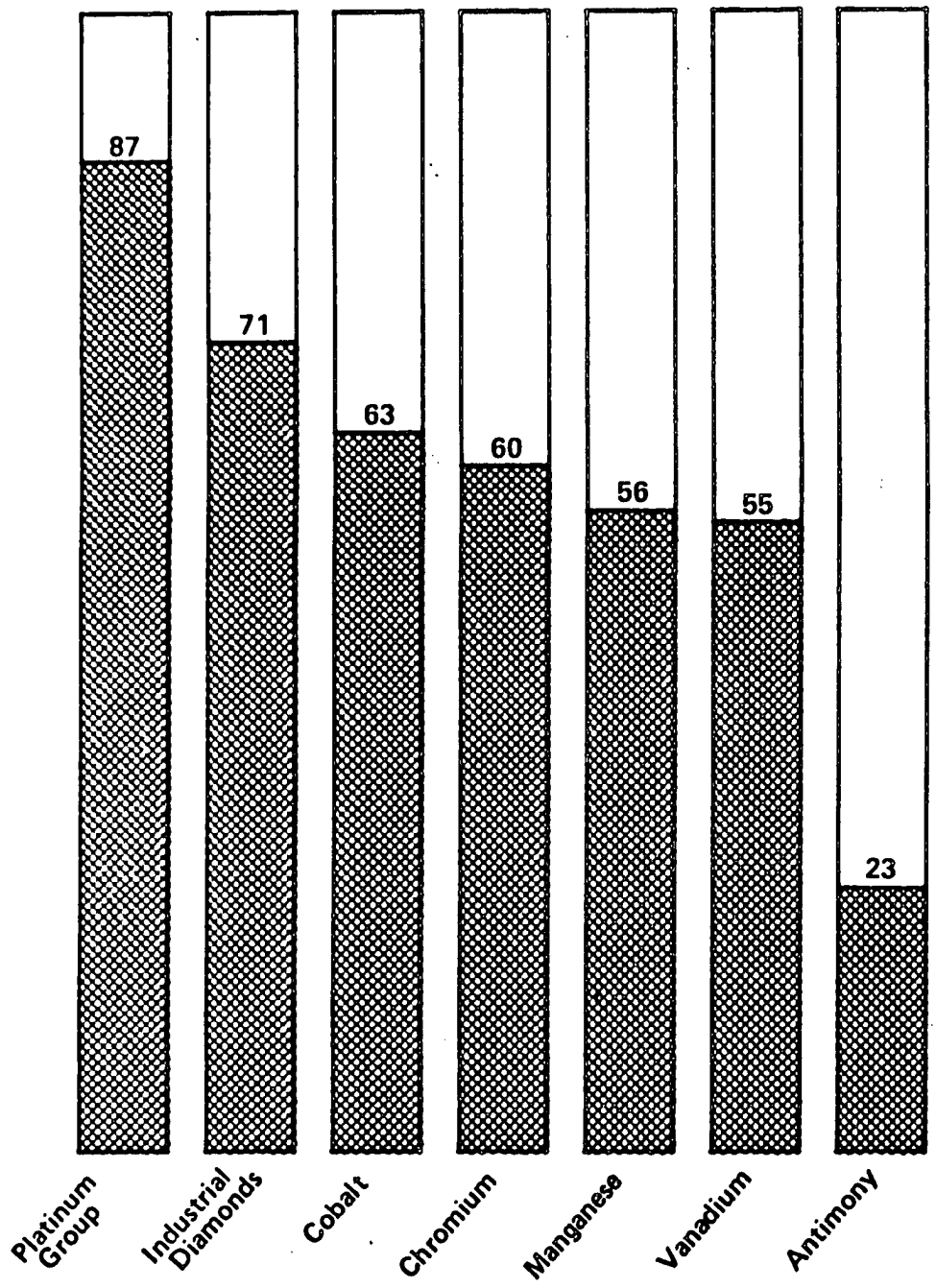
United States: Net Import Reliance of Selected Minerals

(As a Percent of Consumption in 1977)



Southern Africa: Output of Selected Minerals

(As a Percent of Free World Output)



Principal Producers	
Platinum Group	- South Africa
Industrial Diamonds	- South Africa, Zaire
Cobalt	- Zaire, Zambia
Chromium	- South Africa, Rhodesia
Manganese	- South Africa, Gabon
Vanadium	- South Africa
Antimony	- South Africa